

Computer-Assisted Hip Replacement

Advanced Precision: VELYS Hip Navigation at Fox Valley Orthopedics

Fox Valley Orthopedics offers VELYS™ Hip Navigation, an advanced digital precision technology designed to elevate the accuracy of hip replacement surgeries.

What is Computer-Assisted Hip Replacement?

From a patient's perspective, a computer-assisted (or robotic-assisted) hip replacement does not change the physical technique your surgeon uses to access the joint. Your orthopedic surgeon remains in complete control throughout the entire procedure.

The breakthrough lies in technology's ability to provide real-time data. The computer maps your unique anatomy and joint degeneration with extreme detail. This allows your surgeon to customize the procedure to your exact dimensions, helping to restore your hip to its natural, pain-free function.

While several digital tracking systems exist, Fox Valley Orthopedics utilizes VELYS Hip Navigation for its accuracy and seamless integration into the operating room. The system analyzes your pre-operative X-rays to build a digital model of your pelvis. This comprehensive view allows your surgical team to plan your procedure meticulously beforehand and confirm perfect implant alignment using imaging during the live surgery.

Who is a Candidate for Digital Hip Navigation?

If you are a candidate for a standard total hip replacement or hip revision surgery, you are likely eligible for computer-assisted technology. It is highly beneficial for patients with atypical pelvic anatomy or complex joint deformities.

Ultimately, the choice to use this system depends on your specific surgeon's approach and your unique anatomy. If you want this digital navigation utilized in your care, let our team know when booking your initial consultation so we can pair you with a Fox Valley Orthopedics surgeon who specializes in the VELYS system.

Is Computer-Assisted Hip Replacement Effective?

Traditional hip replacement is already a highly successful solution for severe joint pain when conservative treatments fail. However, a small percentage of patients experience early implant wear or complications. Digital hip navigation aims to minimize surgical variables to improve long-term outcomes.

Clinical data suggests that these modern digital systems offer significant advantages:

- **Accurate leg length restoration** to maintain your natural stride.
- **Precise implant offset** to improve overall joint stability.
- **Reduced dislocation risk** by verifying ideal implant positioning during surgery.
- **Preserved natural range of motion** for a more seamless recovery.

What to Expect During Your Surgical Journey

Once your surgery is scheduled, our care team will guide you through every step of preparation. To ensure a smooth recovery, we recommend taking the following steps ahead of your procedure:

- **Arrange home support:** Secure a family member or friend to help you with daily tasks during the first few weeks at home.
- **Clear your living space:** Remove tripping hazards like rugs, secure loose electrical cords, and verify that all stair handrails are sturdy.
- **Complete medical clearance:** Visit your primary care doctor and any specialists like a cardiologist if needed to ensure you are fully cleared for anesthesia.

On the day of your surgery, you will meet with your surgeon and anesthesia team to finalize your personalized sedation plan, which may include a spinal block or general anesthesia.

The surgical procedure typically lasts one to two hours, followed by another one to two hours in the recovery room. Our physical therapy team will get you up and move shortly after surgery to jumpstart your mobility. While you will experience significant pain relief within weeks, achieving full strength and recovery can take up to a year of dedicated outpatient physical therapy.

What is the Cost of VELYS Hip Navigation?

Fox Valley Orthopedics invests in this advanced digital technology because we believe in delivering superior patient outcomes. **There is no additional out-of-pocket cost for the patient**

for the use of the VELYS system. It is billed identically to a standard hip replacement or revision surgery.

For a personalized out-of-pocket cost estimate based on your insurance plan, please contact the Fox Valley Orthopedics financial services team directly.